

## Datasheet: MCA4661A647

<b>Description:</b>	MOUSE ANTI HUMAN DECTIN-1:Alexa Fluor® 647
<b>Specificity:</b>	DECTIN-1
<b>Other names:</b>	BETA GLUCAN RECEPTOR, CD369
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	GE2
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05mg/ml		

<b>Immunogen</b>	NIH3T3 cells expressing full length Beta-glucan receptor.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9BXN2</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">64581</a>    CLEC7A    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	BGR, CLECSF12, DECTIN1
<b>RRID</b>	AB_10895793
<b>Fusion Partners</b>	Spleen cells from immunized C57BL/6 mice were fused with cells of the murine SP2 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Dectin-1 antibody, clone GE2</b> recognizes human Dectin-1, also known as beta-glucan receptor (<math>\beta</math>GR) , a C-type lectin domain family member. It is a major pathogen pattern-recognition receptor that binds beta-glucans, glucose polymers that form cell-wall components or exopolymers of yeasts, fungi and some bacteria. Beta-glucans have also been used experimentally and therapeutically as immunomodulators that enhance resistance to bacterial, yeast, viral and protozoan infections, as well as tumor formation. Dectin-1 also acts as a co-stimulatory molecule on T-cells to induce their proliferation and is necessary for the TLR2-mediated inflammatory response. It is highly expressed on peripheral blood leukocytes and dendritic cells.</p> <p>Human Dectin-1 has two major (<math>\beta</math>GR-A and <math>\beta</math>GR-B) and several minor isoforms. <math>\beta</math>GR-A and <math>\beta</math>GR-B differ by the presence and absence, respectively, of a stalk region. Mouse anti Human Dectin-1 antibody, clone GE2 recognizes both major isoforms. Clone GE2 could be used to inhibit receptor function.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Harnack, U. <i>et al.</i> (2011) Yeast-derived beta-(1-3),(1-6)-D-glucan induces up-regulation of CD86 on dectin-1-positive human B-lymphoma cell lines. <a href="#">Anticancer Res. 31 (12): 4195-9.</a></li> <li>Kyrmizi, I. <i>et al.</i> (2013) Corticosteroids block autophagy protein recruitment in <i>Aspergillus fumigatus</i> phagosomes via targeting dectin-1/Syk kinase signaling. <a href="#">J Immunol. 191 (3): 1287-99.</a></li> <li>Loures, F.V. <i>et al.</i> (2015) Recognition of <i>Aspergillus fumigatus</i> hyphae by human plasmacytoid dendritic cells is mediated by dectin-2 and results in formation of extracellular traps. <a href="#">PLoS Pathog. 11 (2): e1004643.</a></li> <li>Ali, M.F. <i>et al.</i> (2017) Canonical Stimulation of the NLRP3 Inflammasome by Fungal Antigens Links Innate and Adaptive B-Lymphocyte Responses by Modulating IL-1<math>\beta</math> and IgM Production. <a href="#">Front Immunol. 8: 1504.</a></li> </ol>
<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA4661A647>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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**Printed on 02 Oct 2023**

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